

Virginia Division of Consolidated Laboratory Services

VANADIUM IN WATER BY GFAAS by ASTM 3373 - 03 (Reapproved 2007)					
Facility Name: _____ VELAP ID _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Optimum range is 20-200 ug/L based on a 20 uL sample size. Higher conc with dilution and MDL down to 4 ug/L.	1.2				
Are measurements at 318.4 nm with background corrections?	7.1				
Are samples preserved to < 2 with HNO3 or analyzed with 24 hrs (maximum hold time 6 months)?	CFR				
Is all prep and digestion glassware cleaned with HNO3?	11.1				
If determining dissolved vanadium was sample filtered with 0.45 nm filter paper before preserving (go to 11.6)?	9.2				
For total vanadium was 5 mL HNO3 added to each sample and 100 mL sample digested at 95C to 15-20 mL and then filtered (if suspended material present)?	11.2-11.5				
Is sample injected per manufacturer's instruction?	11.6				
QC - Was IDC performed with 7 replicates of midrange independent reference material (Table 1 Limits)? - Calibration blank analyzed at beginning & end of batch? - At least 3 standards with r = 0.990? - Mid range check standard < 15% from actual? - LCS (mid range) every 10 samples - +/- 15%? - If LCS out, are all sample reprocessed or qualified? - Is blank < 0.5 times the LOQ? - MS at least 1/batch at a level 2-5 X the unspiked sample or 10-50 X the MDL? - Duplicate at least 1/batch at a level at least 5 X the MDL or MSD used and use F test for acceptance? - Is second source std analyzed with each batch (NELAC) and control limits established by lab?	14.3.1 14.2.1 14.2.1 14.2.2 14.4.1 14.4.1 14.5.1 14.6.1 14.7.2 14.8.1				
Notes/ Comments:					